

# **State of Louisiana Coastal Protection and Restoration Authority**

# **2015 Annual Inspection Report**

for

## **Barataria Bay Waterway East Shoreline Protection**

State Project Number BA-26 Priority Project List 6

August 24, 2015 Jefferson Parish

### Prepared by:

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### **Table of Contents**

I.	Introduction										
II.	I. Project Description and History1										
III.	III. Inspection Purpose and Procedures										
IV.	IV. Inspection Results										
V.	V. Conclusions										
VI.	Recomme	ndations2									
	Immediate Repairs										
	Programmed Maintenance										
		Appendices									
Ap	pendix A	Project Features Map									
Ap	pendix B	Photographs									
Ap	pendix C	Three Year Budget Projections									
Ap	pendix D	Field Inspection Form									

#### I. Introduction

The Barataria Bay Waterway East Bank Protection Project (BA-26) encompasses 2,790 acres (880 ha) of brackish marsh and open water habitat on the east bank of the Barataria Bay Waterway located in Jefferson Parish, Louisiana approximately 1.5 miles south of Lafitte. The Project is bounded by the Barataria Bay Waterway to the west, various canals to the east and south, and The Pen and Bayou Dupont to the north (Appendix A).

### II. Project Description and History

The Barataria Bay Waterway East Bank Protection Project includes approximately 17,100 linear feet (3.2 miles) of foreshore rock dike bank line protection and an earthen hydrologic barrier created from dredged material from the Barataria Bay Waterway Channel placed to the East along the rock dike within the project area. The rock structure was constructed with a synthetic clay core to reduce its overall weight. The clay material was encapsulated in geotextile bags and placed along the centerline of the dike. The dike is intended to re-establish the eastern bank of the Barataria Bay Waterway and to protect the adjacent marsh from unnatural water exchange and subsequent erosion which is exacerbated by wakes from vessel traffic on the waterway.

Project construction began on February 19, 2001, and was completed on May 21, 2001. Project life is estimated to be 20 years. Annual project inspections are planned.

In December 2005, a contract to raise these structures was awarded and resulted in the placement of 17,417 tons of rock riprap on the settled sections of the structure. The work was completed on January 24, 2006.

### III. Inspection Purpose and Procedures

The purpose of the annual inspection of the Barataria Bay Waterway East Bank Protection Project (BA-26) is to evaluate the constructed project features to identify any deficiencies and to prepare a report detailing the condition of project features and recommended corrective actions. Should it be determined that corrective actions are needed, CPRA shall provide a detailed cost estimate for engineering, design, supervision, inspection, and construction contingencies, and an assessment of the urgency of such repairs (O&M Plan August 9, 2002). The annual inspection report also contains a summary of maintenance projects and an estimated projected budget for the upcoming three (3) years for operation, maintenance and rehabilitation. The three (3) year projected operation and maintenance budget is shown in Appendix C. A summary of past operation and maintenance events completed on the project are outlined in Section II.

An inspection of the Barataria Bay Waterway East Bank Protection Project (BA-26) was held on June 17, 2015, by Luke Prendergast and Melissa Hymel of CPRA, along with Quin Kinler of NRCS. Photographs of that inspection are included in Appendix B of this report.

### **IV.** Inspection Results

The overall condition of the rock shoreline protection structure was good (Photo #1). Some portions of the rock structure exhibited minor settlement adjacent to and south of the marsh creation portion of the South Shore of the Pen Project (BA-41, Photo #2). Accretion and vegetation were observed behind the rock structure at the north end of the project (Photo #3).

#### V. Conclusions

The Barataria Bay Waterway East Protection Project (BA-26) is performing adequately. The rock dike is protecting the existing marsh as designed. Some settlement has been observed and will continue to be monitored; however, no maintenance is required at this time.

#### VI. Recommendations

#### **Immediate Repairs**

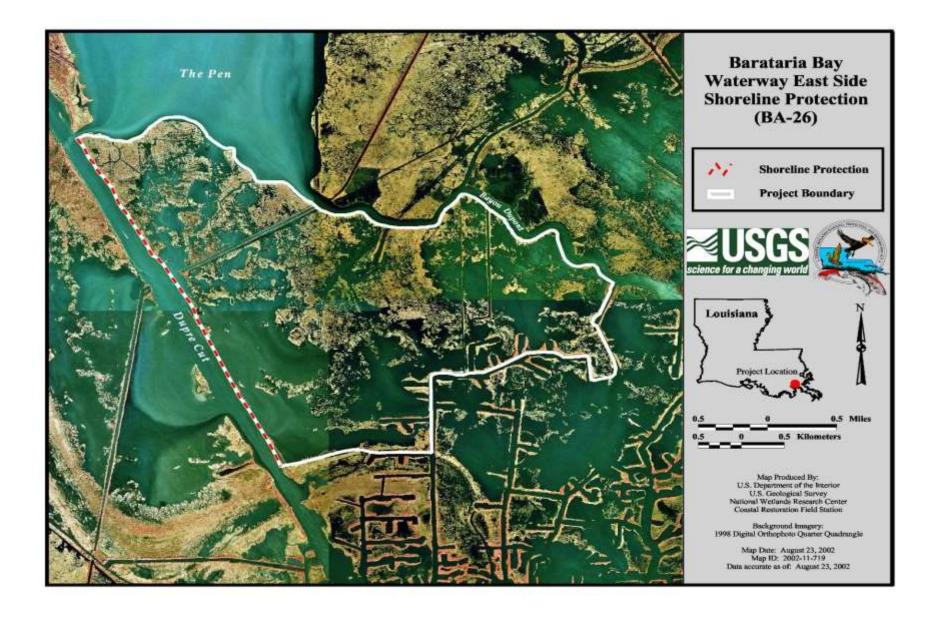
• No immediate repairs are necessary at this time.

#### **Programmed Maintenance**

• Continue to monitor the settlement of the rock structure.

## Appendix A

**Project Features Map** 



Appendix B

**Photographs** 



**Photo #1 – Shoreline Protection** 



Photo # 2 – Some Settlement Noted



Photo #3 – Accretion & Vegetation

# Appendix C

**Three Year Budget Projection** 

#### Barataria Bay Waterway East Bank Protection (BA-26)

Federal Sponsor: NRCS

Construction Completed : 5/2001

PPL6

Current Approved O&M Budget	Year 0 FY02	Year - 1 FY03	Year - 2 FY04	Year -3 FY05	Year -4 FY06	Year -5 FY07	Year -6 FY08	Year -7 FY09	Year -8 FY10	Year -9 FY11	Year -10 FY12	Year -11 FY13	Year -12 FY14	Year -13 FY15	Year -14 FY16	Year - 15 FY 17	Year - 16 FY 18	Year - 17 FY19	Year -18 FY20	Year -19 FY21	Project Life Budget	Currently Funded
State O&M																					\$1,228,500	\$1,228,500
Corps Admin																					\$0	\$0
Federal S&A																					\$0	\$0
Total																					\$1,228,500	\$1,228,500
																					•	Current 3-year
Projected O&M Expenditures																					Project Life	Budget
Maintenance Inspection															\$4,159	\$4,267	\$4,378	\$4,492	\$4,609	\$4,728	\$26,633	\$12,804
General Maintenance																					\$0	\$0
Surveys																					\$0	\$0

General Maintenance							\$0	\$0
Surveys							\$0	\$0
Sign Replacement							\$0	\$0
Federal S&A							\$0	\$0
Maintenance/Rehabilitation							\$0	\$0
E&D							\$0	\$0
Construction							\$0	\$0
Construction Oversight							\$0	\$0
Total	\$4,159	\$4,267	\$4,378	\$4,492	\$4,609	\$4,728	\$26,633	\$12,804

O&M Expenditures from COE Lana Report	\$778,468	Remaining Available O&M Budget	\$387,959	Current Project Life Budget less COE Admin	\$1,228,500
State O&M Expenditures not submitted for in-kind credit	\$0	Current 3-Year Budget	\$12,804	Total Projected Project Life Budget	\$867,174
Federal Sponsor MIPRs (if applicable)	\$62,073	Add'l Funding amount needed thru FY16-FY18	(\$375,155)	Project Life Budget Request Amount	(\$361,326)
Total Estimated O&M Expenditures (as of May 2015)	\$840,541				

# Appendix D

**Field Inspection Form** 

#### MAINTENANCE INSPECTION REPORT CHECK SHEET

Project No. / Name: BA-26 Barataria Waterway (East) Shoreline Protection Date of Inspection: 6/17/2015 Time: 11:45 am

Structure No. n/a Inspector(s): Prendergast, Kinler, Hymel

Structure Description: \_\_Foreshore Rock Dike Water Level Inside: N/A Outside: 1.34'

Type of Inspection: Annual Weather Conditions: Mostly sunny, light wind

Item	Condition	Physical Damage	Corrosion	Photo #	Observations and Remarks
Foreshore Rock Dike	Good	None	N/A	1, 2, 3	Minor settlement noted at some locations. No maintenance needs identified at this time.
Settlement Plates	Good	None	None		